TESTIMONY

OF

ALAN TROTTA THE UNITED ILLUMINATING COMPANY

Regarding

Senate Bill 9
AN ACT CONCERNING CONNECTICUT'S ENERGY FUTURE
Sections 1-5

Before the Energy and Technology Committee

Legislative Office Building March 1, 2018 Good afternoon Senators Winfield and Formica, Representative Reed and members of the Energy and Technology Committee. My name is Alan Trotta and I am the Director of Wholesale Power Contracts for UIL Holdings Corporation (UIL), the parent company for The United Illuminating Company (UI), , and a wholly-owned indirect subsidiary of Avangrid, Inc. I thank you for this opportunity to offer this testimony on behalf of UI on Senate Bill 9, AN ACT CONCERNING CONNECTICUT'S ENERGY FUTURE (the Bill). Specifically, I am offering testimony on Sections 1 - 5 of the Bill. Appendix A to this testimony includes proposed technical edits to Sections 1 and 5 of the Bill that UI and Eversource have provided to DEEP. These proposed edits are discussed below.

Summary: Overall UI is supportive of the changes to renewable procurement standards and procurement policy proposed in Sections 1 – 5 of the Bill. In particular, UI is highly supportive of the provisions in the Bill that sunset the unsustainable and opaque net metering rules in favor of a sustainable and transparent tariff-based procurement of small renewable resources, and commends DEEP and the Governor for advancing much needed reform in the face of vehement opposition from special interests who benefit from the hidden subsidies inherent in net metering. The Company is aware that opponents of the 2018 Comprehensive Energy Strategy (CES) claim that the proposed changes threaten the development of renewable energy in the state. Claims such as this are nothing more than hyperbole. When the dollars in Section 5 of the Bill are summed, it totals up to \$8.4 billion in electric ratepayer dollars being committed to small, instate renewables over the next 12 years. This is an extraordinary commitment, and the \$8.4 billion does not even factor in commitments to far more cost-effective grid-scale renewable

¹ By way of comparison, consider this excerpt from the CES: The total cost to Connecticut ratepayers for residential rooftop solar is 27.2 cents/kWh. This is the cost of net energy billing, or 25.4 cents/kWh (the retail residential

energy projects larger than 2 megawatts, which are procured through other mechanisms. The Bill does not threaten the development of in-state small renewables at all. It simply establishes a budget. Budgets are necessary for just about all governments, businesses and households, yet opponents of the Bill advocate for the status quo, which ensures the availability of an endless stream of ratepayer dollars through the subsidies embedded in the current net metering system.

In the CES, which provides the analysis underpinning the Bill, DEEP expertly crafted an irrefutable rationale for why change is needed to allow the state to move forward with the deployment of small renewables in a sustainable manner. UI agrees with every substantive point made by DEEP with respect to net metering in the CES. As stated in the CES, the compensation received by net-metered resources is linked to electric rates that change over time, and not to the cost of small renewable generation, nor the value that they provide:

net metering and virtual net metering tariffs are not based on either the value that such resources provide to the grid or on the compensation required by the owner of the distributed- generation facility. The blunt structure of these programs was effective when these resources were first coming online; but now that the market for distributed generation is more mature, it is time to ensure these programs are financially sustainable over the long term.²

By way of clarity, it should be noted that UI does not expect to benefit directly from the changes proposed to net metering in the Bill. The issue for UI is not related to its own bottom line, but rather to the shifting of cost responsibility from beneficiaries of net metering to the customers who pay for the benefits received by such beneficiaries. Under the current net metering scheme, the savings enjoyed by customers who have installed distributed generation

electricity rate), plus Green Bank incentives, or 2.1 cents/kWh, to encourage solar development. In contrast, grid scale solar now costs less than 10 cents/kWh on a levelized basis in nominal dollars. (CES at 128)

3

² See CES, at page 35.

(DG) units (such as rooftop solar) are subsidized by those customers that have not installed DG units. The current, unsustainable net metering structure shifts responsibility for a number of fixed costs to the customers who do not enjoy the benefits of onsite generation such as fixed distribution and transmission system costs, the system benefits charge (SBC) and the federally mandated congestion charge (FMCC), which recovers the cost of state-mandated energy contracts and programs. As net metering grows, the fixed cost of these rate components is shifted to a shrinking group of remaining non-net metered customers. Additionally, as net metering grows, the pool of dollars for conservation and the Connecticut Green Bank's renewable energy charge (assessed on a per kilowatt-hour basis) decreases.

The only substantive change that UI recommends to Section 5 of the Bill is a modest reduction of the annual spending cap from \$35 million per year to \$30 million per year. This would reduce the ratepayer commitment from \$8.4 billion to \$7.2 billion. As one of the administrators of the LREC/ZREC program, UI has observed less competitive pricing for some projects selected in recent solicitations, and in its most recent request for proposals UI was required to select every qualifying bid, even those that were not competitive priced, just to commit its budgeted dollars. Further, for two years UI has not had enough eligible Small ZREC projects to spend its budget dollars. This all suggests that current budgets are too high to capture only competitively priced projects. UI has also observed a high rate of attrition in the LREC/ZREC program, which suggests that not all projects that tie up funding commitments are technically or economically feasible. It is UI's view based on its experience that the \$30 million annual cap should be more than sufficient to capture a steady, sustainable influx of competitive and feasible small renewable projects at a reasonable cost for customers. The \$30 million annual

cap was a scenario that DEEP considered in the CES, and UI believes that it represents a better balance between paying customers and beneficiaries than the \$35 million annual cap.

In addition to the proposed modest budget reduction, UI has proposed numerous technical changes to Section 5 to DEEP in the form of "redlined" comments to the Bill. The rationale for the more significant proposed technical changes is discussed below. Overall, the technical changes will help to ensure a simple, sustainable program design that benefits customers, developers, the electric distribution companies (EDCs) as program administrators, and PURA as the body providing program oversight.

Section 1: This section increases the Class I renewable portfolio standard (RPS) to target 40% Class I renewables by 2030. UI has long been an active participant in the process to amend or expand renewable energy opportunities that can enhance Connecticut's energy, environmental and economic goals. UI encourages the state and lawmakers to assess and balance the impact of a cleaner electric system with the affordability of electric costs to the state's ratepayers. UI has a single technical change to Section 1 that it has reviewed with DEEP to enable the retirement of renewable energy certificates (RECs) procured under Section 5 of this Bill in a manner that minimizes costs for customers. This change is coupled with changes to Section 5, and is explained in UI's comments on Section 5 below.

Sections 2 and 3: These sections reduce the alternative compliance payment rate for the failure of a supplier or EDC to meet Class I RPS requirements from 5.5 cents per kWh to 4 cents per kWh. UI is supportive of the reduction to alternate compliance payments rates as an offset to the increased cost of the 40% by 2030 Class I target.

Section 4: As discussed above, UI is very supportive of the changes to net metering established in Section 4 of the Bill. This section is coupled with Section 5 to form a replacement for net metering. More specifically, Section 4 enables the tariff program established in Section 5 to replace net metering and LREC/ZREC with a new program that requires the EDCs to purchase all output from new distributed renewables at fixed rates for twenty years. This allows the generation owner to count on a predictable annual revenue stream with far fewer moving parts than net metering, which requires the net-metered customer to forecast all of the components of their electric bill for the useful life of the generator in order to forecast the value to be received. In UI's view, the change will reduce the number of customers who lose money on self-generation due to inaccurate assumptions on future value. The change can also be expected to reduce the likelihood of generation owners receiving windfall benefits from paying customers because the use of competitive solicitations with defined budgets will drive subsidies to the most competitive levels possible. It's simply better policy than the status quo.

The only concern that UI has with the changes to net metering set forth in Section 4 is the timing. The December 31, 2018 sunset date to non-residential net metering set forth in Section 4 is likely too aggressive to be implemented. First of all, this date is not compatible with the final year of the LREC/ZREC program, which allows projects to come online during 2019, and possibly 2020 in some cases (which can be accommodated by grandfathering projects into net metering that have active LREC/ZREC contracts). Also, the new approach is not currently supported by UI's billing system, and system upgrades will need to be programmed and tested to ensure a smooth transition. UI expects to work with DEEP and Eversource Energy to propose an effective date that can be implemented by the EDCs.

Section 5: Section 5 establishes a tariff-based procurement program for the development of small renewables. It is expected to replace not only net metering, but also LREC/ZREC, the residential solar investment program, shared clean energy and virtual net metering. UI is highly supportive of the procurement approach set forth in Section 5, which would allow customers to be paid for onsite renewable generation under a tariff rate that's fixed for 20 years. UI's vision is for a simple structure in which customers with systems selected via the procurement process are paid a fixed tariff rate for their monthly generation as an offset to their electric bill. UI would receive the energy produced by the systems and the right to all RECs, which would then be retired to satisfy RPS requirements.

UI has worked with DEEP and Eversource Energy on technical changes designed to better implement and manage the tariff procurement process. The two technical changes that UI believes are the least self-explanatory are discussed briefly below:

A. Budget: Whether the annual spending cap is \$35 million per year as proposed in the Bill, or \$30 million as proposed by UI, it would benefit all stakeholders to treat the annual cap as a budgeted cap instead of a hard cap. Generation systems can sometimes perform beyond expectations. For example in a year with above average sunlight, solar generation may produce more energy than expected, or that's allowed for under a hard spending cap. The hard spending caps in the LREC/ZREC program force the EDCs to include "maximum annual quantities" in all LREC/ZREC contracts to ensure that spending never exceed the caps. This is counterproductive. UI favors the use of a budgeted "soft cap" that allows for annual variations between budgeted and actual energy production by renewable generation under the tariff. Sensible rules can be included in the procurement plan and PURA regulations to ensure that actual spending does not exceed budgeted spending due to gaming of the system.

B. Retirement of tariff RECs: The Bill includes a clause that requires all RECs procured by the EDCs to be retired to meet RPS requirements on behalf of electric suppliers and the EDCs. While UI supports this provision, some technical edits were necessary to ensure that customers not pay for the RECs twice. Specifically, the changes (including a technical edit to Section 1) allow PURA to prospectively reduce Class I RPS requirements for suppliers and EDCs based on forecasted energy production under the tariff program established in Section 5. For example, if the Class I requirement for a future year is 25%, and the anticipated energy production of projects under the EDC tariffs for the same year is 5%, PURA would have the authority to prospectively reduce RPS requirements to 20% for such future year. It's critical that this be done prospectively so that suppliers know what their net RPS obligation will be when pricing competitive supply offers to customers. In the above example, a customer would effectively pay twice for RECs (to the benefit of the supplier) if the supplier priced its offers to the customer based on a 25% requirement only to have the requirement dropped to 20% after the customer commits to the price.

There are numerous other technical changes that UI has proposed to DEEP, and UI looks forward to working with DEEP and Eversource Energy over the coming weeks to ensure that the final language allows for a simple, sustainable tariff program. The proposed technical edits to Sections 1 and 5 of the Bill are attached as Appendix A.

Thank you. If you have any questions, please contact me at 203-499-3271. You may also contact Albert Carbone, Manager, AVANGRID/UIL Connecticut State Government Relations at 203-671-4421.

Appendix A Testimony of Alan Trotta, The United Illuminating Company Senate Bill No. 9

AN ACT CONCERNING CONNECTICUT'S ENERGY FUTURE.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Subsection (a) of section 16-245a of the 2018 supplement to the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(a) An(a) Subject to any modifications required by the authority for the specific purpose of retiring renewable energy certificates pursuant to section 5(d) of this act, an electric supplier and an electric distribution company providing standard service or supplier of last resort service, pursuant to section 16-244c, as amended by this act, shall demonstrate:

- (1) On and after January 1, 2006, that not less than two per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (2) On and after January 1, 2007, not less than three and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (3) On and after January 1, 2008, not less than five per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (4) On and after January 1, 2009, not less than six per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (5) On and after January 1, 2010, not less than seven per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (6) On and after January 1, 2011, not less than eight per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

- (7) On and after January 1, 2012, not less than nine per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (8) On and after January 1, 2013, not less than ten per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (9) On and after January 1, 2014, not less than eleven per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (10) On and after January 1, 2015, not less than twelve and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (11) On and after January 1, 2016, not less than fourteen per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (12) On and after January 1, 2017, not less than fifteen and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (13) On and after January 1, 2018, not less than seventeen per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (14) On and after January 1, 2019, not less than nineteen and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (15) On and after January 1, 2020, not less than [twenty] twenty-one per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources; [.]
- (16) On and after January 1, 2021, not less than twenty-two and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy

sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;

- (17) On and after January 1, 2022, not less than twenty-four per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (18) On and after January 1, 2023, not less than twenty-six per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (19) On and after January 1, 2024, not less than twenty-eight per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (20) On and after January 1, 2025, not less than thirty per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (21) On and after January 1, 2026, not less than thirty-two per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (22) On and after January 1, 2027, not less than thirty-four per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (23) On and after January 1, 2028, not less than thirty-six per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (24) On and after January 1, 2029, not less than thirty-eight per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources;
- (25) On and after January 1, 2030, not less than forty per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional four per cent of the total output or services shall be from Class I or Class II renewable energy sources.

Sec. 5. (NEW) (Effective from passage) (a) (1) Not later than one hundred eighty days after January 1, 2019, and annually thereafter, each electric distribution company shall solicit and file with the Public Utilities Regulatory Authority for its approval one or more twenty-year tariffs witheligible generation projects selected in accordance with the procurement plan to sell energy and renewable energy certificates to the electric distribution company under twenty-year tariffs applicable to (A) customers that own or develop new generation projects that are less than two megawatts in size, serve the distribution system of the electric distribution company, are constructed after the effective date of this section and use a Class I renewable energy source that either (i) uses anaerobic digestion, or (ii) has emissions of no more than 0.07 pounds per megawatt-hour of nitrogen oxides, 0.10 pounds per megawatt-hour of carbon monoxide, 0.02 pounds per megawatt-hour of volatile organic compounds and one grain per one hundred standard cubic feet, and (B) customers that own or develop new generation projects that are less than two megawatts in size, serve the distribution system of the electric distribution company, are constructed after the effective date of this section and use a Class I renewable energy source that emits no pollutants. Segmentation of projects larger than two megawatts in size at the same address, or contiguous addresses owned by the same party, or proposed by the same bidder or its affiliates, shall not be permitted.

- (2) On or before September 1, 2018, the authority shall initiate a proceeding to establish a procurement plan and tariffs for such electric distribution companies pursuant to this subsection and may give a preference to technologies manufactured, researched or developed in the state. The procurement plan will be developed by the electric distribution companies in consultation with the Department of Energy and Environmental Protection. The authority may require such electric distribution companies to conduct separate solicitations for the resources in subparagraphs (A) and (B) of subdivision (1) of this subsection based upon the size of such resources to allow for a diversity of selected projects.
- (3) Each electric distribution company shall conduct an annual solicitation or solicitations, as determined by the authority, for the purchase of energy and renewable energy certificates produced by eligible generation projects under this subsection over the duration of the tariff. Such generation projects shall be sized so as not to exceed the load at the customer's individual electric meter or a set of electric meters at the same customer premises, when such meters are combined for billing purposes, from the electric distribution company providing service to such customer, as determined by such electric distribution company, unless such customer is a state, municipal or agricultural customer, then such generation project shall be sized so as not to exceed the load at such customer's individual electric meter or a set of electric meters at the same customer premises, when such meters are combined for billing purposes, and the load of up to five state, municipal or agricultural beneficial accounts identified by such state, municipal or agricultural customer may include the load of up to five additional nonstate or municipal beneficial accounts when sizing such generation project, provided such accounts are critical facilities, as defined in subdivision (2) of subsection (a) of section 16-243y of the general statutes and are connected to athe same microgrid as

<u>the generation project</u>. A shared clean energy facility, as defined in section 16-244x of the general statutes, may participate in any solicitation pursuant to this subsection consistent with the program requirements established by the Department of Energy and Environmental Protection.

- (4) The <u>maximum</u> selected purchase price of energy and renewable energy certificates on a cents-per-kilowatt-hour basis in any given solicitation shall not exceed such <u>maximum</u> selected purchase price for the same resources in the prior year's solicitation, unless the authority makes a determination that there are changed circumstances in any given year. For the first year solicitation issued pursuant to this subsection, the authority shall establish a cap for the selected purchase price for energy and renewable energy certificates on a cents-per-kilowatt-hour basis for any resources authorized under this subsection.
- (b) At the expiration of the residential solar investment program pursuant to subsection (b) of section 16-245ff of the general statutes, each electric distribution company shall offer a tariff to residential customers for the purchase of energy and renewable energy certificates generated from a Class I renewable energy source that has a nameplate capacity rating of twenty-five kilowatts or less for a term not to exceed twenty years. Such generation projects shall be sized so as not to exceed the load at the customer's individual electric meter or a set of electric meters, when such meters are combined for billing purposes, from the electric distribution company providing service to such customer, as determined by such electric distribution company. The authority shall initiate a proceeding not later than September 1, 2018, to establish a rate on a cents-per-kilowatt-hour basis for such tariff, which may be based upon the results of one or more competitive solicitations issued pursuant to subsection (a) of this section and shall be guided by the Comprehensive Energy Strategy prepared pursuant to section 16a-3d of the general statutes. The authority may modify such rate for new customers under this subsection based on changed circumstances and may establish an interim rate prior to the expiration of the residential solar investment program pursuant to subsection (b) of section 16-245ff of the general statutes as an alternative to such program. Prior to the expiration of the residential solar investment program pursuant to subsection (b) of section 16-245ff of the general statutes, residential customers shall not be eligible for the tariff established pursuant to this section unless they are denied eligibility for failure to meet the Connecticut Green Bank criteria as a residential dwelling for the residential solar investment program by the Connecticut Green Bank.
- (c) The aggregate procurement and tariff purchases of energy and renewable energy certificates by electric distribution companies pursuant to subsections (a) and (b) of this section shall be <u>budgeted</u> up to thirty-five million dollars in year one, <u>with actual expenditures to vary based on reasonable variations between budgeted and actual energy production</u>, and increase by up to an additional thirty-five million dollars per year in each of the years two through twelve of such a tariff, provided the annual purchases under subparagraph (A) of subdivision (1) of subsection (a) of this section, subparagraph (B) of subdivision (1) of subsection (a) of this section (b) of this section, each in the aggregate, shall not exceed forty per cent of the total annual dollar amount established pursuant to this subsection. The authority shall monitor the competitiveness of any procurements authorized under this section and may adjust the annual purchase amount established in this subsection or other procurement parameters to maintain competitiveness. Any money not allocated in any given year shall not roll into

the next year's available funds. Additionally, the renewable energy credit procurement program established under section 16-244r of the general statutes shall be closed to new applications no later than the date upon which the electric distribution companies initiate the solicitation process set forth in subdivision (a)1 of this section, and uncommitted funds from such program shall expire. The obligation to purchase energy and renewable energy certificates shall be apportioned to electric distribution companies based on their respective distribution system loads, as determined by the authority. The authority may give preference to projects that provide electric distribution system benefits, include energy storage systems, utilize time of use rates or other dynamic pricing or provide other energy policy benefits identified in the Comprehensive Energy Strategy prepared pursuant to section 16a-3d of the general statutes. To be eligible for selection, projects must have demonstrated meaningful progress towards construction/completion. If a project is proposed for a location where there is currently no meter for electric service at the site, but where there will be electric service in the future, it must be demonstrated after the addition of electric service that the size of the project does not exceed the customer load at the site.

- (d) Each electric distribution company shall retire the renewable energy certificates it purchases pursuant to this subsection on behalf of all ratepayers to satisfy the obligations of all electric suppliers and electric distribution companies providing standard service or supplier of last resort service pursuant to section 16-245a of the general statutes, as amended by this act. The authority shall establish procedures for the retirement of such renewable energy certificates—, which may include reductions to the total output or services required by an electric such supplier or an electric distribution company required pursuant to section 16-245a based on the energy production forecasted to be procured through a solicitation required pursuant to this section. The authority shall determine such reduction in the renewable portfolio standard at least one year in advance of the renewable portfolio standard calendar year. The electric distribution companies shall not be responsible for any costs or expenses associated with differences between the actual number of RECs retired and the number of RECs that whereas assumed to be retired when the reduction in the renewable portfolio standard was calculated.
- (e) The net costs of any tariff offered by an electric distribution company pursuant to this section, including reasonable costs incurred in connection with this section, shall be recovered on a timely basis through a nonbypassable fully reconciling component of electric rates for all customers of the electric distribution company. Any net revenues from the sale of products purchased in accordance with any tariff offered pursuant to this section shall be credited to customers through the same fully reconciling rate component for all customers of such electric distribution company.